

REMARKS

Applicants appreciate the Examiner's thorough examination of the subject application and request consideration of the following remarks in addition to those included in the After Final Response dated December 13, 2005 along with the amendments in said After Final Response prior to taking further action in the subject application.

OBVIOUSNESS DOUBLE PATENTING REJECTION(S)

The Advisory Action indicates that applicant's remarks regarding the double patenting rejections are noted, but however, the protection provided by the previously allowed patents and those at bar are not so distinguished.

The arguments made by Applicant in the After Final Response dated December 13, 2005 included the following observations regarding U.S. Patent No. 6,404,717 (Okamura '717").

1. None of the claims of Okamura '717 teach or suggest, that the reproduction signal characteristics of a short reproducing power control mark and a long reproducing power control mark be measured from information data that is recorded in a data recording area of an optical recording medium.

2. Okamura '717 does not teach or suggest that the predetermined length mark signal measurement means is further configured for detecting a specific pattern including the short reproducing power control mark. Rather Okamura '717 *relies on a timing producing section* to indicate when a signal quantity detecting section should sample the reproducing signal so as to correctly sample a signal from the short mark. That is, Okamura '717 is dependent upon proper

timing to read from the short marks, whereas the invention of the pending claims are not so dependent.

3. The difference between what is disclosed and taught in Okamura `717 is further clarified when Fig. 2 of Okamura `717 is examined. This figures in Okamura `717 shows that the invention thereof concerns a magneto-optical disk which has domains for short and long recording marks *which are separate from the data recording domain*. In contrast, in the present invention the *short and long reproducing control marks are provided with the information data recorded in the data recording area of the optical recording medium*. In other words, the disk being read in Okamura `717 does not have the same arrangement as a disk which can be read by the devices of the present invention.

The arguments made by Applicant in the After Final Response dated December 13, 2005 included the following observations regarding U.S. Patent No. 6,771,576 ("Okamura `576").

Claim 7 of Okamura `576, as with reference to the discussion above regarding Okamura `717, does not teach or suggest measuring the reproduction signal characteristics of long and short reproducing control marks from information data that is recorded in a data recording area of an optical medium. In fact, as apparent from Fig. 2 of Okamura `576, this reference is directed to a magneto-optical disk where the long and short marks are recorded in a region separate from a data recording region. In other words, the disk being read in Okamura `576 does not have the same arrangement as a disk which can be read by the devices of the present invention.

In sum, the foregoing observations regarding Okamura `717 and `576, both point out that the methods and devices described in these patents are directed to devices and methods that are not

Applicant: T. Okumura, et al.

U.S.S.N.: 10/082,466

Additional Remarks In Response To Advisory Action

Page 5 of 7

intended to detect and/or measure a reproducing power control mark(s) , such as a short reproducing power control mark, that is/are recorded in the data recording area of an optical recording medium from the other marks that also are recorded in the data recording area of an optical recording medium. Thus, Applicant respectfully requests that if the Examiner intends to maintain the double patenting rejection, that the specific areas in the specification of either of Okamura '717 and Okamura '576 which are being relied upon to form the basis of the double patenting rejection being specifically detailed and identified in any further action on the merits. If the claims are otherwise in a condition for allowance, Applicant requests that the undersigned be contacted so that this area of rejection can be dealt with and so that the Examiner need not mail another action on the merits. In this regard, Applicant also notes that if the Examiner would want to conduct an interview to advance this issue, then please contact the undersigned as well.

DRAWING OBJECTIONS

The Advisory Action indicates that the drawing objections are to be maintained because:

As far as the Examiner can decipher the disclosed invention with respect to the “only” to the short mark, such as found in the disclosure -see paragraph 80 in PGPub nO US2002/0145956- corresponds to the present application. Such details are NOT DEPICTED IN ANY OF THE FIGURES, let along the argued figure 3.

As Applicant understands the above comment, the Advisory Action asserts that Fig. 3 does not illustrate the feature of “measuring the reproduction signal characteristics corresponding

only to the short reproducing power control mark.”

Applicant would first note that the objection to the drawing figures in the final office action was understood to be directed to the feature in claims 19 and 20 concerning “calculating an average value” and not to “measuring the reproduction signal characteristics corresponding only to the short reproducing power control mark” (see *e.g.*, claim 1). Thus, Applicant provided comments in the Response to Final Office dated December 13, 2005 to address the objection as it was understood from the final office action, namely to address wherein the drawing figures show “calculating an average value.” Notwithstanding the foregoing and in the interests in advancing prosecution, Applicant provides the following remarks clarifying/describing how the drawing figures show “measuring the reproduction signal characteristics corresponding only to the short reproducing power control mark.”

Figs. 1 and 3 illustrate a short pattern detection circuit 6, which detects a specific pattern including therein the short reproducing power control mark, and a short mark amplitude calculation circuit 8, which measures a reproduction signal characteristic corresponding only to the short reproduction power control mark out of all marks (data and power control) contained in the detected specific pattern. In sum, the predetermined length mark measurement means of claim 1, as to measuring the reproduction signal characteristics corresponding only to the short reproducing power control mark included in the specific pattern, is shown in the drawings with reference to the flow of data depicted in Fig. 1 (see elements 6 and 8 thereof) and by the process indicated in Fig. 3. Also, as per Fig. 3, only the short reproducing power control marks are identified (see elements 62-66 thereof) and passed onto an amplitude calculation circuit to have

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
Additional Remarks In Response To Advisory Action
Page 7 of 7

their reproducing signal characteristics measured. It should be noted that Fig. 3 does not illustrate any other kind of mark being passed onto the amplitude calculation circuit for measurement.

If Applicant misunderstood the question being raised in the Final Office Action, then Applicant respectfully apologizes. In any event, Applicant respectfully submits the foregoing remarks to address the objection to the drawing figures as articulated in the Advisory Action.

It is respectfully submitted that the subject application is in a condition for allowance. Early and favorable action is requested.

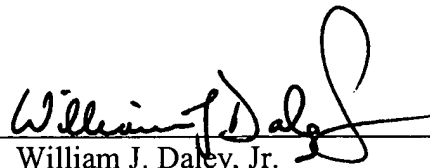
Applicants believe that additional fees are not required for consideration of the within Additional Remarks. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed

for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,
Edwards Angell Palmer & Dodge, LLP

Date: February 2, 2006

By:


William J. Daley, Jr.
(Reg. No. 35,487)
P.O. Box 9169
Boston, MA 02209
(617) 439- 4444



Attorney Docket No. 57,090 (70904)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: T. Okumura, et al. EXAMINER: Psitos, Aristotelis M.
U.S.S.N.: 10/082,466 GROUP: 2653
FILED: February 25, 2002 Conf. No. 4306
FOR: OPTICAL REPRODUCING DEVICE THAT CONTROLS THE STRENGTH
OF THE LIGHT BEAM DURING REPRODUCTION (As-Amended)

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail No. EV 754865636 US in an envelope addressed Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 13, 2005.

By: _____

Safiya Jarvis

**EXAMINING GROUP 2653
RESPONSE TO FINAL OFFICE ACTION
UNDER 37 C.F.R. 116 EXPEDITED PROCEDURE**

Sir:

The following is in response to the Office Action mailed October 13, 2005, in the above referenced application, which Office Action restarted the time period for responding for the Office Action mailed September 12, 2005.

Applicants believe that no extension of time is required since this response is being filed before the expiration of the specified time period. Applicants, however, conditionally petition

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 2 of 25

for an extension of time to provide for the possibility that such a petition has been inadvertently overlooked and is required. As provided below charge Deposit Account No. **04-1105** for any required fee.

Please amend the above-identified application as follows:

Amendments to the Claims begin on page 3 of this paper.

Remarks begin on page 10 of this paper.

Amendments to the Claims

This listing of claims will replace all prior versions; and listing, of claims in the application.

Listing of Claims:

1. (Currently Amended) An optical reproducing device comprising:

predetermined length mark signal measurement means for measuring reproduction signal characteristics respectively of a short reproducing power control mark and of a long reproducing power control mark from information data that is recorded in data recording area of an optical recording medium; and

power control means for controlling reproducing power of a light beam based on the measured reproduction signal characteristics of the short and long reproducing power control marks,

wherein the predetermined length mark signal measurement means is further configured and arranged for ~~detecting to detect~~ a specific pattern including ~~therein~~ the short reproducing power control mark from ~~amongst~~ a bit arrangement pattern of the information data in the data recording area, and ~~when the specific pattern is detected for measuring to measure~~ the reproduction signal characteristic corresponding only to the short reproducing power control mark included in the specific pattern.

2. (Currently Amended) An optical reproducing device comprising:

predetermined length mark signal measurement means for measuring reproduction signal characteristics respectively of a short reproducing power control mark and of a long reproducing

power control mark from information data that is recorded in a data recording area of an optical recording medium;

power control means for controlling reproducing power of a light beam based on the measured reproduction signal characteristics of the short and long reproducing power control marks; and

wherein the predetermined length mark signal measurement means includes:

data reproduction means for reproducing information data bits from a reproduction signal of the optical recording medium;

comparison means for comparing a bit arrangement pattern of the information data reproduced by the data reproduction means with a specific pattern including the short reproducing power control mark, and for detecting a coincidence of the specific pattern in the bit arrangement pattern of the information data; and

signal measurement means for measuring the reproduction signal characteristic of information data bits corresponding to the short reproducing power control mark, when the comparison means detects the bit arrangement pattern of the information data coincides with the specific pattern including the short reproducing power control mark included in the specific pattern detected by the comparison means to coincide with the bit arrangement pattern.

3. (Original) The optical reproducing device of claim 1, wherein:

the short reproducing power control mark is a mark having a length of $2T$ (where T is a channel bit length), and the specific pattern is constituted by a pattern having a length arrangement of mT $2T$ $2T$ nT (where m and n are predetermined positive integers).

4. (Original) The optical reproducing device of claim 2, wherein:

the short reproducing power control mark is a mark having a length of $2T$ (where T is a channel bit length), and the specific pattern is constituted by a pattern having a length arrangement of mT $2T$ $2T$ nT (where m and n are predetermined positive integers).

5. (Original) The optical reproducing device of claim 3, wherein $m = n = 2$.

6. (Original) The optical reproducing device of claim 4, wherein $m = n = 2$.

7. (Original) The optical reproducing device of claim 1, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

8. (Original) The optical reproducing device of claim 2, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

9. (Original) The optical reproducing device of claim 3, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

10. (Original) The optical reproducing device of claim 4, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

11. (Original) The optical reproducing device of claim 5, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

12. (Original) The optical reproducing device of claim 6, further comprising reproduction condition control means for controlling a reproduction condition based on the measured reproduction signal characteristics.

13. (Original) The optical reproducing device of claim 7, wherein:
the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

14. (Original) The optical reproducing device of claim 8, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

15. (Original) The optical reproducing device of claim 9, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

16. (Original) The optical reproducing device of claim 10, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

17. (Original) The optical reproducing device of claim 11, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target-value.

18. (Original) The optical reproducing device of claim 12, wherein:

the predetermined length mark signal measurement means measures a ratio between amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the measured amplitude ratio gets close to a target value.

19. (Previously Presented) The optical reproducing device of any of claims 1-6, wherein:

a plurality of short and long reproducing control marks are recorded in the optical recording medium;

the predetermined length mark signal measurement means measures the reproduction signal characteristics corresponding to each short reproducing mark and calculates an average value using the measured reproduction signal characteristics.

20. (Previously Presented) The optical reproducing device of any of claims 13-16, wherein:

a plurality of short and long reproducing control marks are recorded in the optical recording medium;

the predetermined length mark signal measurement means:

- measures the reproduction signal characteristics corresponding to each short and long reproducing control marks,
- calculates an average value for each of the short and long reproducing marks using the measured reproduction signal characteristics, and
- calculates a ratio between average amplitude values of the short and long reproducing power control marks; and

the reproduction condition control means controls the reproducing power of the light beam so that the calculated amplitude ratio based on the average amplitude values gets close to a target value.

REMARKS

Applicants appreciate the Examiner's thorough examination of the subject application and request reconsideration of the subject application based on the foregoing amendments and the following remarks. Applicants also acknowledge with thanks, the Examiner's restarting of the period for responding set forth in the Office Action mailed September 12, 2005.

Claims 1-20 are pending in the subject application.

Claims 1-20 stand rejected under 35 U.S.C. §102 and/ or 35 U.S.C. §103. The Examiner also objected to claims 13¹, 5, 7, 11, 13, 15, 17, 19 and 20 as contradictory and also appears to object to claims 3-20 as being identical.

Claims 1 and 2 were amended for clarity as further described herein in regards to the claim objections.

The drawing figures were objected to as allegedly failing to show claimed features. Applicants respectfully traverse the objection as discussed further herein. Thus, corrected drawing figures are not required in response to the drawing objection.

DRAWING OBJECTIONS

The Examiner objected to the drawing figures because the claimed feature of claims 19 and 20 ("calculating an average value") must be shown or the features canceled from the claims. Applicants respectfully traverse the objection and submit that the claimed feature is shown in the

¹ The Office Action lists claim 13 twice, however, Applicants addressed the objection directed to "contradictory" on the basis that the Examiner had intended to refer to claim 3.

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 11 of 25

drawing figures.

In this regards, Applicants direct the Examiner's attention to Fig. 3 for example which shows a sum circuit 83, a counter 84 and a division circuit 85, where the division circuit 85 takes as inputs the sum from the sum circuit 83 and divides this by the count from the counter 84. It is submitted that Fig. 3 for example shows the claimed feature.

In view of the foregoing remarks, Applicants submit that the drawing figures are considered acceptable, that further correction of the drawing figures is not required and that cancellation of claimed features is not required.

CLAIM OBJECTIONS

As indicated herein the Examiner has objected to claims 3², 5, 7, 11, 13 15, 17, 19 and 20 as being contradictory. It also appears from the Office Action that the Examiner also is objecting to claims 3-20 because the limitations of the claims are asserted as being identical. Because of the location of the remarks in the Office Action it is unclear whether the Examiner was objecting to the claims or was making a remarks as to the treatment of the identified claims in the discussion regarding the prior art which followed. Thus, out of an abundance of caution, Applicants treated the remarks as if the Examiner was objecting to the language.

As to the asserted identical claim limitations, Applicants would note for example that while the language of claims 3 and 4 might appear to be identical, claim 3 depends from claim 1 and claim 4 depends from claim 2. Thus, the scope of claims 3 and 4 are not identical because

each claim depends from a different base claim. The foregoing observation also applies to claims 5-20. Thus, claims 3-20 are not identical in scope.

As to the contradiction asserted in the Office Action, Applicants provide the following clarification. In this regard, Applicants have assumed that because the specific remarks in the office Action were directed to claims 1 and 2, the other identified claims were objected to because of their dependency from an objectionable base claim.

The Examiner appears to consider the claim language in claim 1 to be contradictory because the claim first recites that the reproduction characteristics of both short and long power control marks are measured (claim 1, lines 2-5) and then later recites that measuring of reproduction signal characteristics corresponding to only the short power control marks is performed. Applicants respectfully disagree that the language of claim 1 is contradictory as explained below.

Lines 2-5 of claim 1, recites that the predetermined length mark signal measurement means measures reproduction signal characteristics of both short and long power control marks. Claim 1, lines 9-13 thereof, also recite that the predetermined length measurement means *detects a specific pattern that includes the short power control mark from a bit arrangement pattern of the information data*, and measures the reproduction signal characteristics corresponding only to the short power control mark in the detected pattern. That is, from the specific pattern which includes the short power control mark along with other marks representing information data, only the reproduction signal characteristic corresponding to the short power control mark (but not the

² See discussion in footnote no. 1.

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 13 of 25

marks representing information data) is measured. It is respectfully submitted that this is in no way contradictory to that set forth in lines 2-5 of claim 1.

Lines 9-134 of claim 1 also do not in any way suggest that reproduction signal characteristics corresponding to long power control marks are not at all measured. The language of the claim recites that the predetermined length mark signal measurement means can detect a specific pattern including a short power control mark, and from this detected specific pattern, measures only the reproducing signal characteristics corresponding to the short power control mark. Such an arrangement does not exclude or prevent the predetermined length mark signal measurement means from also measuring reproduction signal characteristics of a long power control mark, for example, when a specific pattern including a long power control mark is detected.

It is respectfully submitted that the foregoing remarks directed to claim 1 also apply to claim 2.

Notwithstanding the foregoing, Applicants have nonetheless amended each of claims 1 and 2 to make the above described arrangement appear more clear in the claims. Such amendments to claims 1 and 2 comprise a rephrasing of the original wording in the claims and thus such amendments do not add new matter. It also is noted that such amendments are also consistent with explanations or observations provided in previously submitted Response(s) by Applicants. Therefore, it also is submitted that such amendments to claims 1 and 2 should not necessitate or require further searching and/or consideration by the Examiner and thus entry of the amendment into the subject application is respectfully requested.

35 U.S.C. §102 & 103 REJECTIONS

The Examiner rejected claims 1-20 under 35 U.S.C. §102(b) as being anticipated by and/or under 35 U.S.C. §103 as being obvious over the prior art for the reasons provided on pages 4-7 of the Office Action mailed September 12, 2005. Because claims 1 and 2 were amended in the instant amendment, the following discussion refers to the language of the amended claims. However, only those amended features specifically relied upon to distinguish the claimed invention from the cited prior art shall be considered as being made to overcome the cited reference. The following addresses the identified rejections of the Examiner.

Claims 1, 2 & 7-18

The Examiner rejected claims 1, 2 and 7-18 under 35 U.S.C. §102(b) as being anticipated by or in the alternative under 35 U.S.C. §103 as being obvious over the acknowledge prior art further considered with JP 200099945. Applicants respectfully traverse as discussed below.

Applicants would note initially that a rejection under §102 also would appear to be inappropriate as the grounds for rejection refer to the machine assisted translations (MAT) of the secondary JP cited art. It is an axiom that for a §102 rejection to be proper the claimed invention must be disclosed in its entirety in a single reference; not a combination of references. Another secondary reference maybe be used in special circumstances and for a limited purpose; however, it appears that the JP reference is not being used in such a limited fashion but rather to provided support for disclosure not found in the admitted prior art.

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 15 of 25

In addition to the grounds for the rejection, the Examiner mentions that "The Examiner's previous request for further identification of the prior art has been overlooked ... the Examiner considers the JP system discussed in the specification - JP08-63817 as such but needs confirmation from the applicants in order to complete the search report." In this regard, Applicants are unsure as to what prior art the Examiner is seeking further identification of as the specification clearly identifies the JP patent reference. If the Examiner's remarks are directed to the system described in the Background of Invention portion of the subject application (pgs 9-12 thereof) concerning another method where a power control area is not provided, then it should be noted that this system was not disclosed in materials available to the public. As such, there is no documentary basis for this description. As such, it appears that the described system may not comprise prior art under §102(b) for this further reason, as the described system was not publicly disclosed as well as not being a system that was by others.

If the Examiner's reference to the admitted prior art is contending that JP 08-63817, which is identified in the subject application, anticipates claims 1 or 2, Applicants respectfully traverse such an assertion. The cited JP reference does not disclose, teach nor suggest a predetermined length mark signal measurement means for measuring reproduction signal characteristics of a short reproducing power control mark and of a long reproducing power control mark *from information data that is recorded in a data recording area of an optical recording medium*. The cited JP reference explicitly describes and teaches that a separate reproducing power controlling region is provided in which region the power control marks are recorded. As described in the Background of Invention of the subject application, such an

arrangement is disadvantageous because the available area for recording information data is reduced (pg. 8, lines 19-25).

As to the secondary reference, JP 2000-099945, as noted above the reliance upon the disclosures of this reference necessarily undermine the assertion that JP08-63817 anticipates the claimed invention. As to the alternative suggestion that the combination of these two JP references would yield the claimed invention, Applicants respectfully traverse. The suggested combination does not overcome the deficiency identified above as to JP08-63817, namely that the power control recording marks are recorded in a separate area or region of the optical recording medium. This is because Fig. 9 and paragraph [0016] of the secondary reference (JP2000-099945) explicitly clarifies that a separate reproducing power control region is provided.

In sum, the disclosures and teachings of both JP references, whether taken alone or in combination, teach providing a separate reproducing power control region for the recording of power control marks. Thus, JP08-63817 or JP2000-099945, alone or in combination do not teach or suggest an optical reproducing device in which reproduction signal characteristics of short and long power control marks are measured *from information data that is recorded in a data recording region or area of an optical recording medium*. It also necessarily follows that there can be no teaching, suggestion or motivation offered in either reference to modify the device disclosed therein so as to be capable of doing this.

In sum, the cited art does not anticipate nor render obvious the invention of either of claim 1 or claim 2 but rather in fact teaches away from the claimed invention.

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 17 of 25

As to claims 7-18, these claims depend respectively from one of claims 1 or 2. As such, each of claims 7-18 are considered allowable at least because of their dependency from a base claim that is considered to be allowable. This shall not, however, be considered an admission that claims 7-18 are not separately patentable from the cited art.

It is respectfully submitted that for the foregoing reasons, claims 1, 2 and 7-18 are patentable over the cited reference(s).

Claims 3-6

Claims 3-6 stand rejected under 35 U.S.C. §103 as being unpatentable over the acknowledged prior art in view as applied to claims 1, 2 and 7-18 and further in view of Tanaka et al. [USP 5,825,742; "Tanaka"]. Applicants respectfully traverse as discussed below.

As to claims 3-6, these claims depend respectively from one of claims 1 or 2. As such, each of claims 3-6 are considered allowable at least because of their dependency from a base claim that is considered to be allowable. This shall not, however, be considered an admission that claims 3-6 are not separately patentable from the cited art.

Notwithstanding the foregoing, Applicants make the following observations regarding the assertions directed to Tanaka. The Examiner admits that the admitted prior art does not disclose the limitations of any of claims 3-6, but asserts that Tanaka depicts such an arrangement. Applicants respectfully disagree with the characterization of what is being taught in Tanaka.

Tanaka (see col. 9, lines 13-20 thereof) explicitly describes and teaches that the patterns shown in Figs 9-10 thereof *are specifically used only for evaluating the edge shift of the*

recording marks that were formed using the invention disclosed in Tanaka. In other words, using the invention of Tanaka where information is recorded in a magneto-optical disk using up to five power values, a *first test pattern* corresponding to Fig. 9 of Tanaka and a *second test pattern* corresponding to Fig. 10 of Tanaka are formed. As described in Tanaka, using these two test patterns the edge shift of marks recorded using the invention of Tanaka can be evaluated.

From the foregoing it is clear that the patterns shown in Figs. 9-10 of Tanaka are test patterns that are used for evaluation. There is no description, teaching or suggestion that such patterns are formed in an optical storage medium and more particularly in a region which also would contain information data. Thus, one skilled in the art would not have been motivated to record the test patterns used for evaluation purposes of Tanaka into the optical storage medium such as those disclosed in the cited JP references.

Furthermore, the patterns and marks described in Tanaka are not for the purposes of assisting in the controlling of reproducing power of a light beam. Contrary to the assertion on page 7 of the Office Action, Tanaka is not illustrative of a control pulse sequence. The sequences of pulses illustrated in Figs. 9 and 10 are merely test sequences for evaluating edge shift and are not control pulses. Thus, it also does not necessarily follow that one skilled in the art would have been motivated by the test pulse sequences so as to create patterns used for controlling reproducing power of a light beam.

It is respectfully submitted that for the foregoing reasons, claims 3-6 are patentable over the cited reference(s).

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 19 of 25

Claims 19-20

Claims 19-20 stand rejected under 35 U.S.C. §103 as being unpatentable over the art as applied above and further in view of Okamura et al. [USP 6,288,992; "Okamura"]. Applicants respectfully traverse as discussed below.

As to claims 19-20, these claims depend respectively from one of claims 1 or 2. As such, each of claims 19-20 are considered allowable at least because of their dependency from a base claim that is considered to be allowable. This shall not, however, be considered an admission that claims 19-20 are not separately patentable from the cited art.

It is respectfully submitted that for the foregoing reasons, claims 19-20 are patentable over the cited reference(s).

The following additional remarks shall apply to each of the above.

As provided in MPEP-2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Or stated another way, "The identical invention must be shown in as complete detail as is contained in the ... claims. *Richardson v Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ 2d. 1913, 1920 (Fed. Cir. 1989). Although identify of terminology is not required, the elements must be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). It is clear from the foregoing remarks that the above identified claims are not anticipated by the admitted prior art.

As provided in MPEP 2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 20 of 25

teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F. 2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F. 2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As provided above, the admitted prior art and the references cited, alone or in combination, include no such teaching, suggestion or motivation.

Furthermore, and as provided in MPEP 2143.02, a prior art reference can be combined or modified to reject claims as obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Additionally, it also has been held that if the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. Further, and as provided in MPEP-2143, the teaching or suggestion to make the claimed combination and the reasonable suggestion of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). As can be seen from the forgoing discussion regarding the disclosures of the cited references and the admitted prior art, there is no reasonable expectation of success provided in the reference or the admitted prior art. Also, it is clear from the foregoing discussion that the modification suggested by the Examiner would change the principle of operation of the device disclosed in the reference.

As the USPTO Board of Patent Appeals and Interferences has held, "The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 21 of 25

provide a motivation or reason for the worker in the art, without benefit of appellant's specification, to make the necessary changes in the reference device." *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ351, 353 (BD. Pat. App. & Inter. 1984). It is clear from the foregoing remarks, however, that the suggested modification to the device disclosed in the acknowledged prior art would require a modification to the operation of the disclosed device and/or is more than an obvious matter of design choice.

It is respectfully submitted that for the foregoing reasons, claims 1-20 are patentable over the cited reference(s) and thus satisfy the requirements of 35 U.S.C. §102(b) and/or §103. As such, these claims are allowable.

OBVIOUSNESS DOUBLE PATENTING REJECTION(S)

The Office Action asserts a number of grounds as to why claims of the subject application are rejectable under the judicially created doctrine of obviousness type double patenting. The Examiner further provided the reasoning why there was no statutory bar against this double patenting rejection. The following addresses separately each of the asserted rejections.

Claims 1, 2, 7-12, 13-18 and 19-20

Claims 1, 2, 7-12, 13-18 and 19-20 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1, 11/1, 12/11/1 and 9/1 of U.S. Patent No. 6,404,717 (Okamura '717"). Applicants respectfully traverse.

The above claims of the subject application provide that the reproduction signal

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 22 of 25

characteristics of a short reproducing power control mark and a long reproducing power control mark be measured from information data that is recorded in a data recording area of an optical recording medium. None of the claims of Okamura '717 teach or suggest such a feature.

Further the pending claims provide that the predetermined length mark signal measurement means is further configured for detecting a specific pattern including the short reproducing power control mark. Such a feature also is not taught or suggested in Okamura '717. Rather Okamura '717 relies on a timing producing section to indicate when a signal quantity detecting section should sample the reproducing signal so as to correctly sample a signal from the short mark. That is, Okamura '717 is dependent upon proper timing to read from the short marks, whereas the invention of the pending claims are not so dependent.

The above difference is further clarified by Fig. 2 of Okamura '717, which shows that the invention thereof concerns a magneto-optical disk which has domains for short and long recording marks which are separate from the data recording domain. This is in contrast to the present invention where the short and long reproducing control marks are provided with the information data recorded in the data recording area of the optical recording medium.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 1, 2, 712, 12-18 and 19-20 are allowable.

Claims 1, 3 & 5

Claims 1, 3 and 5 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 7/5/3 of U.S. Patent No. 6,771,576 ("Okamura

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 23 of 25

'576") in view of Tanaka et al. Applicants respectfully traverse.

Claim 7 of Okamura '576, as with reference to the discussion above regarding Okamura '717, does not teach or suggest measuring the reproduction signal characteristics of long and short reproducing control marks from information data that is recorded in a data recording area of an optical medium. In fact, as apparent from Fig. 2 of Okamura '576, this reference is directed to a magneto-optical disk where the long and short marks are recorded in a region separate from a data recording region.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 1, 3 and 5 are allowable.

Claims 2, 4 & 6

Claims 2, 4 and 6 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 7/5/3 of U.S. Patent No. 6,771,576 ("Okamura '576") in view of either of Tani of Fuji and all further considered with Tanaka et al. Applicants respectfully traverse.

The above discussion distinguishing the claims from Okamura '576 also apply to distinguish claims 2, 4 and 6 over claim 7/5/3 of Okamura '576 in view of either of Tani of Fuji and all further considered with Tanaka et al.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 2, 4 and 6 are allowable.

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 24 of 25

Claims 7-12 & 17-18

Claims 7-12 and 17-18 stand rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 7/5/3 of U.S. Patent No. 6,771,576 ("Okamura '576") in view of Tanaka et al., or over claim 7/5/3 of U.S. Patent No. 6,771,576 ("Okamura '576") in view of either of Tani of Fuji and all further considered with Tanaka et al. Applicants respectfully traverse.

The above discussion distinguishing the claims from Okamura '576 also apply to distinguish claims 7-12 and 17-18 over claim 7/5/3 of Okamura '576 in view of either of Tani of Fuji and all further considered with Tanaka et al., or over claim 7/5/3 of Okamura '576 in view of Tanaka et al.

In view of the foregoing remarks, it is respectfully submitted that the rejection has been overcome and claims 7-12 and 17-18 are allowable.

It is respectfully submitted that the subject application is in a condition for allowance. Early and favorable action is requested.

Applicants believe that additional fees are not required for consideration of the within Response. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed

Applicant: T. Okumura, et al.
U.S.S.N.: 10/082,466
RESPONSE TO FINAL OFFICE ACTION
Page 25 of 25

for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit

Account No. 04-1105.

Respectfully submitted,
Edwards Angell Palmer & Dodge, LLP

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By:



William J. Daley, Jr.
(Reg. No. 35,487)
P.O. Box 9169
Boston, MA 02209
(617) 439-4444